

Appl. No. 10/710,929
Amdt. dated September 07, 2005
Reply to Office action of July 22, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims:

1 (currently amended): A dual-band antenna, comprising:

5 a substrate having a first surface and a second surface that is on the opposite side of
the substrate from the first surface;
a transmission line coupled to a OLE_LINK1 feeding point OLE_LINK1 for
transmitting RF signals;
an emitting unit having a first wire and a second wire that are both disposed on the
10 first surface, and the first wire and the second wire are crossed intersecting at
the feeding point, the emitting unit being disposed at a first edge of the
substrate; and
a ground pad disposed on the second surface of the substrate, wherein the ground
pad comprises a base from the base extending from a second edge of the
15 substrate toward the feeding point, the first and second edges being located at
opposite sides of the substrate.

2 (original): The dual-band antenna of claim 1 wherein the transmission line is a
microstrip.

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3 (original): The dual-band antenna of claim 1 wherein the transmission line is a coplanar
waveguide.

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4 (original): The dual-band antenna of claim 1 wherein the transmission line is a coaxial
cable.

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5 (original): The dual-band antenna of claim 1 wherein the base of the ground pad is substantially rectangular.

6 (currently amended): The dual-band antenna of claim 1 wherein the ground pad further 5 comprising comprises an extension disposed on the second surface and extending from the base toward [[a]] the first edge of the substrate.

7 (original): The dual-band antenna of claim 6 wherein the extension is adjacent to the emitting unit.

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8 (original): The dual-band antenna of claim 6 wherein the extension of the ground pad is substantially rectangular in shape.

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9 (currently amended): The dual-band antenna of claim 6 wherein the combination of the base and the extension forms an "L" shape.

10 (original): The dual-band antenna of claim 1 wherein the first wire decides the low operation frequency of the dual-band antenna.

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11 (original): The dual-band antenna of claim 1 wherein the second wire is shorter than the first wire and decides the high operation frequency of the dual-band antenna.

12 (original): The dual-band antenna of claim 1 wherein the second wire is extended upward from the feeding point and bent at some angle, being parallel to one side of 25 the base.

13 (original): The dual-band antenna of claim 1 wherein the first wire is extended upward from the feeding point and bent at some angle, being parallel to one side of the base.

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14 (original): The dual-band antenna of claim 1 wherein the characteristic impedance of the transmission line is 50 Ohms.